Part 2 -- Remarks

This Amendment and Response is responsive to the office action mailed October 2, 2003. In that office action, claim 1 was rejected as anticipated under 35 U.S.C. 102(b) by Stover (3,914,708); claims 3 and 5-7 were rejected as obvious under 35 U.S.C. 103(a) over Stover in view of Sze.

Reconsideration of these rejections is respectfully requested, with respect to the pending claims 1, 3 and 5-7.

Examiner Interview

The undersigned wishes to thank the Examiner for the telephone interview on December 5, 2003. That interview included a discussion of amending claim 1 to more positively recite that the continuously increasing nonuniform dopant concentration profile causes the varactor to have an approximately linear capacitance/voltage response characteristic. Also discussed was amending claim 1 to more clearly define the area having the continuously increasing nonuniform dopant concentration profile. Amended claim 1 has been amended to incorporate the modifications discussed with the Examiner and it is believed that amended claim 1 is now allowable based on the interview.

Anticipation Rejection

Reconsideration of the rejection of claim 1 as anticipated by Stover is respectfully requested.

Amended claim 1 requires, in the manner set forth, a doped region in a varactor, having a nonuniform dopant concentration profile that continuously increases with increasing depth of the doped region, starting from the diode junction region and continuing to a peak concentration region, where the continuously increasing nonuniform dopant concentration profile causes the varactor to have an approximately linear capacitance/voltage response. Stover does not disclose that a continuously increasing nonuniform dopant concentration profile causes a varactor to have an approximately linear capacitance/voltage response characteristic for the reasons

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previously discussed in the Amendment and Response filed June 13, 2003. Since Stover does not teach or suggest all of the subject matter required in amended claim 1, Stover does not anticipate or render obvious amended claim 1.

Obviousness Rejection

Reconsideration of the rejection of claims 3 and 5-7 as obvious over Stover in view of Sze is respectfully requested.

Claims 3 and 5-7 should be patentable in conjunction with amended claim 1 from which they depend and for other reasons previously articulated.

Conclusion

As a result of the amendments and remarks set forth above, it is believed that all pending claims in this application are in condition for allowance. Allowance is respectfully requested. The Examiner is requested to contact the undersigned by telephone to discuss any issues which may inhibit the immediate allowance of the claims.

Respectfully submitted,

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